EXHIBIT A

PTO/SB/05 (06-03)
Approved for use through 07/31/2003. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
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UTILITY PATENT APPLICATION TRANSMITTAL

(Only for new nonprovisional applications under 37 CFR 1.53(b))

Attorney Docket No.	543312000420
First Inventor	Ravinder S. DHALLAN
Title	METHODS FOR DETECTION OF GENETIC DISORDERS
Express Mail Label No.	EV336629286US

APPLICATION ELEMENTS

See MPEP chapter 600 concerning utility patent application contents.

ADDRESS TO: MS Patent Application
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

1. [X] Fee Transmittal Form (e.g., PTO/SB/17) (2 pages) *(Submit an original, and a duplicate for fee processing)*
2. [X] Applicant claims small entity status. See 37 CFR 1.27.
3. [X] Specification [*Total Pages* 340]
   (preferred arrangement set forth below)
   - Descriptive title of the invention
   - Cross Reference to Related Applications
   - Statement Regarding Fed sponsored R & D
   - Reference to sequence listing, a table, or a computer program listing appendix
   - Background of the Invention
   - Brief Summary of the Invention
   - Brief Description of the Drawings *(if filed)*
   - Detailed Description
   - Claim(s)
   - Abstract of the Disclosure
4. [X] Drawing(s) *(35 U.S.C. 113)* [*Total Sheets* 33]
5. Oath or Declaration [*Total Sheets*]
   a. [ ] Newly executed (original or copy)
   b. [ ] Copy from a prior application (37 CFR 1.63(d)) *(for continuation/divisional with Box 18 completed)*
      i. [ ] DELETION OF INVENTOR(S) Signed statement attached deleting inventor(s) named in the prior application, see 37 CFR 1.63(d)(2) and 1.33(b).
6. [X] Application Data Sheet. See 37 CFR 1.76 (2 pages)
7. [ ] CD-ROM or CD-R in duplicate, large table or Computer Program *(Appendix)*
8. Nucleotide and/or Amino Acid Sequence Submission *(if applicable, all necessary)*
   a. [ ] Computer Readable Form (CRF)
   b. Specification Sequence Listing on:
      i. [ ] CD-ROM or CD-R (2 copies); or ii. [ ] Paper
   c. [ ] Statements verifying identity of above copies

ACCOMPANYING APPLICATIONS PARTS

9. [ ] Assignment Papers (cover sheet & document(s))
10. [ ] 37 CFR 3.73(b) Statement *(when there is an assignee)* [ ] Power of Attorney
11. [ ] English Translation Document *(if applicable)*
12. [ ] Information Disclosure Statement (IDS)/PTO-1449 [ ] Copies of IDS Citations
13. [ ] Preliminary Amendment
14. [X] Return Receipt Postcard (MPEP 503) *(Should be specifically itemized)*
15. [ ] Certified Copy of Priority Document(s) *(if foreign priority is claimed)*
16. [ ] Nonpublication Request under 35 U.S.C. 122 (b)(2)(B)(i). Applicant must attach form PTO/SB/35 or its equivalent.
17. [ ] Other:

18. If a CONTINUING APPLICATION, *check appropriate box, and supply the requisite information below and in the first sentence of the specification following the title, or in an Application Data Sheet under 37 CFR 1.76:*

[ ] Continuation [ ] Divisional [X] Continuation-in-part (CIP) of prior application No.: PCT/US03/06198

Prior application information: Examiner _____ *Art Unit:* _____

For CONTINUATION or DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.

19. CORRESPONDENCE ADDRESS

[X] *Customer Number:* 25226 OR [ ] *Correspondence address below*

Name					
Address					
City		*State*		*Zip Code*	
Country		*Telephone*		*Fax*	

Name (Print/Type)	Eric H. Witt	*Registration No. (Attorney/Agent)*	44,408
Signature		*Date*	September 11, 2003

I hereby certify that this correspondence is being deposited with the U.S. Postal Service as Express Mail, Airbill No. EV336629286US, in an envelope addressed to: Mail Stop Patent Application, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the date shown below.

Dated: 9/11/03 Signature: _____ (Tamara Alcaraz)

pa-821113

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FEE TRANSMITTAL for FY 2003

Effective 01/01/2003. Patent fees are subject to annual revision.

[X] Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT ($) 3611.00

Complete if Known	
Application Number	Not Yet Assigned
Filing Date	Concurrently Herewith
First Named Inventor	Ravinder S. DHALLAN
Examiner Name	Not Yet Assigned
Art Unit	Not Yet Assigned
Attorney Docket No.	543312000420

METHOD OF PAYMENT *(check all that apply)*

[ ] Check [ ] Credit Card [ ] Money Order [ ] Other [ ] None

[X] Deposit Account

Deposit Account Number: 03-1952

Deposit Account Name: Morrison & Foerster LLP

The Director is hereby authorized to: *(check all that apply)*

[X] Charge fee(s) indicated below [X] Credit any overpayments

[X] Charge any additional fee(s) during the pendency of this application

[ ] Charge fee(s) indicated below, **except for the filing fee** to the above-identified deposit account.

FEE CALCULATION

1. BASIC FILING FEE

Large Entity Fee Code	Large Entity Fee ($)	Small Entity Fee Code	Small Entity Fee ($)	Fee Description	Fee Paid
1001	750	2001	375	Utility filing fee	375.00
1002	330	2002	165	Design filing fee	
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SUBTOTAL (1) ($) 375.00

2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

			Extra Claims		Fee from below		Fee Paid
Total Claims	336	-20** =	316	x	9.00	=	2844.00
Independent Claims	9	-3** =	6	x	42.00	=	252.00
Multiple Dependent					140.00	=	140.00

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***or number previously paid, if greater; For Reissues, see above*

FEE CALCULATION (continued)

3. ADDITIONAL FEES

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Other fee (specify)					

*Reduced by Basic Filing Fee Paid **SUBTOTAL (3)** ($) 0.00

SUBMITTED BY				Complete *(if applicable)*	
Name (Print/Type)	Eric H. Witt	*Registration No. (Attorney/Agent)*	44,408	*Telephone*	(650) 813-5755
Signature	E. H. Witt			*Date*	September 11, 2003

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Name (Print/Type)	Eric H. Witt	*Registration No. (Attorney/Agent)*	44,408	*Telephone*	(650) 813-5755
Signature	E. H. Witt			*Date*	September 11, 2003

METHODS FOR DETECTION OF GENETIC DISORDERS

CROSS-REFERENCE TO RELATED APPLICATIONS

[0001] This application is a continuation-in-part of PCT/US03/06198, filed February 28, 2003, which claims benefit under 35 U.S.C. §119(e) of U.S. Provisional Patent Application No. 60/378,354, filed May 8, 2002, and which is a continuation-in-part of U.S. Patent Application No. 10/093,618, filed March 11, 2002, which claims benefit under 35 U.S.C. §119(e) of U.S. Provisional Patent Application No. 60/360,232, filed March 1, 2002; this application is also a continuation of PCT/US03/_____, Method for Detection of Genetic Disorders, filed August 29, 2003 (Attorney Docket No. 54331-20004.41); this application further is a continuation-in-part of U.S. Patent Application No. 10/376,770, filed February 28, 2003, which claims benefit under 35 U.S.C. §119(e) of U.S. Provisional Patent Application No. 60/378,354, filed May 8, 2002, and which is a continuation-in-part of U.S. Patent Application No. 10/093,618, filed March 11, 2002, which claims benefit under 35 U.S.C. §119(e) of U.S. Provisional Patent Application No. 60/360,232, filed March 1, 2002. The contents of these applications are incorporated by reference in their entirety.

BACKGROUND OF THE INVENTION

FIELD OF THE INVENTION

[0002] The present invention is directed to a method for the detection of genetic disorders including chromosomal abnormalities and mutations. The present invention provides a rapid, non-invasive method for determining the sequence of DNA from a fetus. The method is especially useful for detection of chromosomal abnormalities in a fetus including translocations, transversions, monosomies, trisomies, and other aneuplodies, deletions, additions, amplifications, translocations and rearrangements.

BACKGROUND ART

[0003] Chromosomal abnormalities are responsible for a significant portion of genetic defects in liveborn humans. The nucleus of a human cell contains forty-six (46) chromosomes, which contain the genetic instructions, and determine the operations of the cell. Half of the forty-six chromosomes originate from each parent. Except for the sex chromosomes, which are quite different from each other in normal males, the chromosomes from the mother and the chromosomes from the father make a matched set. The